

# Executive Summary

## Introduction

This Environmental Impact Statement (EIS) presents several alternatives to implement National Park Service (NPS) fire policies in Yosemite National Park and in the El Portal Administrative Site (Map 1-1), hereafter referred to as the Project Area. The EIS supports the implementation document for the fire program - the fire management plan. The fire management plan would be prepared and approved subsequent to the issuance of a Record of Decision for the EIS.

Most of Yosemite National Park is designated Wilderness, but also includes, and is adjacent to, road and trail corridors, historical sites, residential communities and businesses, and administrative and recreational areas of several jurisdictions. Fire management reflects this diversity of land use. This document proposes alternatives for management of wildland and prescribed fire, for protection of human life and property, for restoration and maintenance of fire-dependent ecosystems, and for reduction of hazardous fuels. It also examines the environmental impacts of each alternative.

## Purpose of and Need for the Fire Management Plan

### *Purpose of the Plan*

The purpose and goals of the Yosemite fire management program include the following:

- To develop a plan that is consistent with NPS wildland fire management policy and adheres to guiding principles from the Federal Fire Policy. These principles include the following:
- Firefighter and public safety is the first priority in every fire management activity.
- Wildland fire is an essential ecological process and natural change agent.
- Fire management plans, programs, and activities support land and resource management plans and their implementation.
- Sound risk management is a foundation for all fire management activities.
- Fire management programs and activities are economically viable, based on values to be protected, costs, and land and resource management objectives.
- Fire-related plans and activities should be based upon the best available science.
- Fire management plans and activities incorporate public health and environmental quality considerations.
- Federal, state, tribal, local, and interagency coordination and cooperation are essential.

In accordance with the Federal Fire Policies, the Yosemite fire management program would specifically:

- Execute a fire management program that provides for the safety of firefighters and the public, including safe operations and safe fire management-related facilities (e.g., helibases, fire camps, fire stations).

- Use wildland and prescribed fire to restore and maintain park ecosystems to target conditions.
- Reduce the risk of fire to cultural resources (e.g., historic buildings and pictographs) through fuel reduction, prescribed burning, or fire suppression to prevent fires from damaging cultural resources. Fire would also be used as a tool to manage cultural landscapes.
- Reduce the risk of catastrophic fire to wildland/urban interface (WUI) communities by the use of prescribed fire and mechanical fuel reduction techniques.
- Ensure that fire management planning and operations support the goals and objectives of resource and Wilderness management programs.

### ***Need for the Plan***

The fire management plan translates NPS fire management policies into specific management actions. The Yosemite fire management program has followed these policies for over three decades. The program, while making significant inroads, has not been able to fully meet two of the park's primary objectives: ecosystem restoration, and mitigation of wildfire hazard through the use of prescribed and wildland fire on an ecologically significant scale.

Factors contributing to this shortfall include lack of funds and staff, smoke issues, subordination of prescribed fire projects to regional and national wildland fire emergencies, agency and interagency moratoriums on the use of prescribed and wildland fire, and a heavy reliance on the fall season for executing prescribed fire projects.

Particularly since the 2000 fire season, increased funding for staff and projects has been made available to fire management programs throughout the country. The National Fire Plan places new emphasis on the importance of executing risk reduction projects as well as restoring fire as a critically important ecological process. Emphasis has been placed on the use of mechanical measures to accomplish these projects near wildland/urban interface (WUI) communities. There are six communities in Yosemite National Park identified as WUI areas: Foresta, Hodgdon Meadow, Yosemite West, Yosemite Valley, El Portal, and Wawona. The reduction of hazardous amounts of wildland fuels in, and adjacent to, these communities is a central focus of the fire management program. Managers are being held accountable for identifying and implementing fuel reduction programs in WUI areas which have been identified in the Federal Register.

Because of these and other factors, the park's 1990 fire management plan requires revision to better support the National Fire Plan. A revised plan would apply information and experience gained from previous fire management plans and programs to the development of new strategies to better achieve program goals.

The *Final Yosemite Fire Management Plan EIS* presents and analyzes alternatives for the fire management program in Yosemite National Park. It also presents and analyzes effects that would occur as a result of implementing these alternatives in different areas of the park.

### **Decisions to be Made**

Yosemite National Park's Superintendent would make a recommendation for the final decision to the NPS Regional Director, Pacific West Region, who is the Deciding Official for the *Yosemite Fire Management Plan EIS*. They would recommend and decide on:

- 1) Whether or not to implement the proposed action (Alternative D), an alternative to the proposed action, or to continue current fire management operations (Alternative A, the No Action Alternative).
- 2) The mitigation and monitoring that would be included in the decision.

## Issues and Concerns Used to Develop Alternatives

Preliminary issues were identified using public and agency comments, consultations, and open house records from public scoping periods in 1999 and 2001. Issues raised and comments made by the public during scoping and through consultation were summarized as concern statements (these are listed in Chapter 1, Purpose and Need) and were used to develop action alternatives and determine the scope of analysis. Concerns related to the following subjects:

**Planning Direction** Comments addressed the process or scope of the planning effort, or suggested that certain process-related subjects should be central to the program or plan.

**Fire Management Activities** Many comments addressed actual management of the fire program, or various strategies, philosophies, or goals for fire management; many comments addressed prescribed fire, managed wildland fires, thinning, and mechanical treatment.

**Community Protection** Protecting communities and developed areas was a major concern to residents, while the effects of wildland fire on developed areas and/or protection activities concerned others.

**Ecosystems and Fire Management** Numerous comments addressed restoration of Yosemite's ecosystems and the role of fire as a natural process. Other comments emphasized that the NPS should conduct fire ecology studies.

**Elements of the Natural Environment** Concerns about the effects of fire on specific natural resources (e.g., wildlife, water, soil stability, vegetation, and others) were expressed.

**Air Quality** Numerous comments were received about compliance with air quality regulations, reduced air quality from smoke, and the differing effects on air quality from various fire management techniques.

**Wilderness** Comments were received on the role of fire in Wilderness, as well as the appropriateness of various fire management activities in Wilderness.

**Access** Numerous comments spoke to the appropriateness, inappropriateness, or need for roads, bridges, and trails providing access and firebreaks.

**Social Environment** Comments were received about whether or not the NPS should include cost recovery and other economic considerations, and use local labor for fuel reduction treatments. Others expressed concerns about noise related to fire management activities and scenic impacts.

**Communication, Coordination, and Consultation** Many comments addressed the need for, and role of consultation, communication, and coordination activities between the fire management program and communities, other agencies, organizations, and other groups.

## Principal Differences and Clarifications Between The Draft EIS and Final EIS

- There are only six WUI communities in Yosemite National Park: Foresta, Hodgdon Meadow, Yosemite West, Yosemite Valley, El Portal, and Wawona. The reduction of hazardous amounts of wildland fuels in, and adjacent to, these communities is a central focus of the fire management program. The use of mechanical means to achieve forest restoration targets in Yosemite National Park would only occur within these six WUI areas.
- Maximum diameter of trees removed mechanically to achieve forest restoration target conditions within the six WUI areas has been reduced from 31.5" to 20" dbh (diameter at breast height).
- WUI areas are broken into two components: the core community plus a ¼ mile-wide belt around it (inner WUI; 6,425 acres), and a belt extending from ¼ mile up to no more than 1½ miles from the community (outer WUI; 22,316 acres). Actual perimeters are affected by topography, and in several areas are less than 1½ miles.
- The reduction of wildland fuels and the restoration of forest target conditions within the six WUI areas would occur through four steps:
  - 1) Inner WUI - Mechanical thinning of trees less than 12" would be done initially, generally followed by pile burning, to reduce threats from wildland fire. Prescribed fire, rather than mechanical thinning, would be used initially in areas where it can be done safely and effectively. In parts of inner WUI that are Wilderness, only hand thinning would be allowed.
  - 2) Outer WUI - Prescribed burning would be used as the initial treatment for both wildland hazard fuel reduction and to achieve forest restoration targets. This may be done concurrently with the first step, providing greater protection for the communities.
  - 3) Inner WUI - Mechanical thinning of trees up to 20" to achieve forest restoration target conditions would be done following these initial two actions. Where prescribed fire in the first step did achieve target conditions, this third step would be omitted.
  - 4) Outer WUI - Mechanical thinning of trees up to 20" dbh would occur after the first three actions, but only if a prescribed fire has failed to achieve forest restoration target conditions. If subsequent mechanical thinning is needed following prescribed fire to achieve forest restoration target conditions in any part of the six outer WUI areas, a separate environmental compliance document for public review would be prepared for each forest restoration thinning project. In parts of outer WUI that are Wilderness, only hand thinning would be allowed.
- Mechanical forest restoration activities to achieve target conditions would occur only in the six WUI areas. The focus throughout the remainder of the park is to allow natural processes to prevail to the fullest practical extent, consistent with the protection of public safety and environmental regulations.
- Wildland fuel reduction in the inner WUI areas to reduce the risk of wildland fire would occur within six to eight years, and forest restoration in the six WUI areas would take up to 20 years under the Preferred Alternative (Alternative D). Removal of 12 – 20 inch dbh trees to accomplish this latter objective would be spread out over this time period. Commercial sale of

timber would only be considered as a last resort if the woody material could not be burned, chipped, sold as firewood, or used for park administrative purposes, and if it poses a wildland fire risk if left on site. Implementation of all projects is subject to the availability of funds.

- Thinning for removal of hazardous wildland fuels along road corridors would be done to establish and maintain fuelbreaks and evacuation routes for wildland fire emergencies. Roadside thinning would be generally limited to trees and shrubs less than 12" dbh, and occasionally trees up to 20" dbh to break up continuous canopies along road margins. This thinning would occur no further than 200 feet from the road centerline, and would not occur in Wilderness.
- Road corridor thinning would occur along: 1) the portions of Wawona Road, Big Oak Flat Road, and El Portal Road (Highways 41, 120, and 140, respectively) that are within the Suppression Unit, 2) roads to Hetch Hetchy and Aspen Valley, 3) public roads within five WUI communities (Yosemite Valley is excluded), 4) the Mariposa Grove and Glacier Point roads, and 5) the fire motorway roads shown in red on Map 2-23.
- No new roads would be constructed, and no existing roads would be widened anywhere in the park to conduct hazard reduction or forest restoration thinning operations.
- Tracked or wheeled mechanical equipment would not be used anywhere in Wilderness to achieve forest restoration target conditions or to remove hazardous wildland fuels. Hand thinning of trees would be done for wildland fire or prescribed fire management in Wilderness areas.
- No trees or woody material would be sold to provide funding for either park operations or for the Yosemite fuels management program.
- Forest restoration targets are not based on any specific year in the park's history, but rather on a general range of conditions that existed prior to 90-130 years ago, when fires influenced ecosystems in a more natural manner, and before the onset of fire suppression. The result of fire's influence in Yosemite Valley, for example, is believed to have been a less dense conifer forest than exists today, with more oak habitat, larger meadows for wildlife, lower quantities of wildland fuels, and correspondingly lower intensities of wildland fires. Initial restoration of more natural conditions would be followed by the perpetual use of prescribed and wildland fire to maintain fire-dependent ecosystems. Mechanical restoration work would be done where prescribed fire or wildland fire could not be safely used, either due to the risk of fire escape or to smoke issues.

## Description of the Wildland/Urban Interface (WUI)

Prescribed burning and mechanical fuel reduction would be used to restore and maintain ecosystems and target fuel loading in the wildland/urban interface (WUI). This area is defined as the primary park developments occupied throughout the year (Wawona, Foresta, El Portal, Yosemite West, Hodgdon Meadow, and Yosemite Valley) plus up to a 1½ mile-wide belt around them. The 1½ mile perimeter is part of the State of California definition of WUI.

In all alternatives, high priority would be given to the removal of unnaturally dense stands of small trees in the WUI zone. The removal of such trees would follow the guidelines of the Sierra Nevada Forest Plan Amendment Record of Decision (U.S. Forest Service 2001). Such trees are no greater than 20" dbh, with particular attention given to trees less than 12" dbh.

Generally, mechanical thinning to achieve fuel reduction target conditions would be done in a ¼ mile-wide belt immediately adjacent to the six WUI communities (inner WUI), followed by prescribed fire. If safe and practical to do so, prescribed fire would be used first in certain locations, rather than mechanical methods, to reduce wildland fuels. Work to achieve forest restoration targets conditions in this area would generally occur after work was done to reduce the risk of unwanted wildland fires. For example, under Alternative B, WUI protection through wildland fuel reduction would be done within 5 years, while forest restoration work could take up to 15 years.

From ¼ mile to 1½ miles from the six WUI communities (outer WUI), prescribed fire would be used first. If target forest restoration conditions were not achieved through the use of prescribed fire, mechanical thinning would occur following preparation of environmental compliance documents subject to public review.

The immediate focus for reducing the risk of wildland fire in WUI areas is on 6,425 acres, which is a combination of the acreage of the six WUI communities themselves, plus up to a ¼ mile-wide belt around each of them (i.e., the inner WUI area).

## Alternatives, Including the Preferred Alternative

### *Process for Formulating the Alternatives*

The action alternatives considered in the *Final Yosemite Fire Management Plan EIS* were developed from comments and concerns expressed by the public; input from federal, state, and local agencies; guidance from existing park plans; policy guidance from the NPS, the 2001 Federal Fire Policy, and the National Fire Plan; and research, monitoring, and experience from the existing fire management program.

Using issues first identified in 1999, fire management staff began consultations with fire and resource management specialists within the park and within other fire and land management agencies. Concepts for developing a range of alternatives began taking shape in December 2000, following consultations with the park's Resources Management Division. It was suggested that the alternatives vary in two ways:

- 1) by proposing various combinations of wildland fire, prescribed burning, fuels treatments, and fire suppression activities; and
- 2) by variations in the amount of time needed to reduce fuels in developed areas and to restore or maintain natural fire regimes throughout most of the park.

Finally, the comments received during the March and April 2001 scoping period were used to further develop the range of alternatives and identify needed analyses.

An analysis of the natural fire regime for each of the park's main vegetation types, combined with known fire history, yielded maps showing estimates of the number of natural fires that various areas of the park may have "missed" because of fire suppression. This estimate is called the *Fire Return Interval Departure (FRID)*. FRID estimates were used to identify and estimate acres of land that need reintroduction of fire for ecosystem restoration. Areas with higher numbers of missed natural fires are assumed to have unnaturally heavy accumulations of wildland fuels. Such areas are likely to burn with unnaturally high intensities, which could threaten natural and cultural resources, as well as communities and developments.

Areas of the park that show the greatest departure from the natural fire regime, and thus are at the greatest risk of unnaturally high-intensity wildfires, are on the west side of the park at lower elevations. This is also where the WUI communities occur. Much of this area was subject to intensive logging activity prior to being added to the national park. Without fire, second growth forests have grown in even-aged stands with high densities of wildland fuels.

The action alternatives (B, C, and D) were developed with three specific goals:

1. to reintroduce fire into areas that show adverse effects of fire suppression (i.e., vegetation is beyond its natural range of variability and has a high FRID value);
2. to maintain the natural fire regime in park ecosystems where vegetation is within its natural range of variability (i.e., FRID values are low); and
3. to reduce forest fuels near communities, roads, and other park developments so prescribed and wildland fire can be used more safely throughout the park, and to reduce the risk of unwanted wildland fire.

Chapter 2 describes target desired conditions for vegetation and fuels for vegetation types of the Sierra Nevada, which includes measurable variables that can be used to determine the need for, and achievement of, restoration and maintenance of more naturally balanced park forests. The variables were developed in conjunction with science and management personnel from Crater Lake, Lassen Volcanic, and Sequoia and Kings Canyon national parks. Based on this research, approximately 16,000 acres a year should be treated with prescribed and wildland fire in Yosemite to restore and maintain park fire cycles and more natural amounts of wildland fuels. While wildland fire activity would vary from year to year, projections can be made about the acreage that would be treated with prescribed fire for ecosystem restoration and fuel reduction purposes (Appendix 6).

The approximately 16,000 acres treated annually to achieve ecosystem restoration and maintenance, as well as greater protection from unwanted wildland fire, would include:

- acres of fuel reduction in the six WUI areas and the road corridors through prescribed fire and mechanical thinning;
- acres of ecological restoration and maintenance through prescribed fire and managed wildland fire; and
- acres burned by wildland fire that escapes initial control efforts in areas scheduled for prescribed burning but still achieves acceptable ecological effects, and by wildland fires or prescribed fires that are suppressed due to smoke issues. (Current federal fire policy does not consider fires that are suppressed to have any beneficial effects. Although such acreage will be reported by Yosemite National Park according to federal fire policy requirements, the Yosemite fire management plan will count such acreage for internal use such as in FRID calculations).

## ***Alternatives Considered***

The alternatives considered in the *Final Yosemite Fire Management Plan EIS* include the following:

- |                |                              |
|----------------|------------------------------|
| Alternative A: | No Action (existing program) |
| Alternative B: | Aggressive Action            |

Alternative C: Passive Action

Alternative D: Multiple Action (Preferred Alternative)

Alternative D also is the environmentally preferred alternative, which is the alternative that causes the least damage to the environment and best protects, preserves, and enhances historic, cultural, and natural resources. Further discussion of the environmentally preferred alternative appears in Chapter 2.

Under the action alternatives, the three fire management zones currently in effect (NPS 1990) would be changed to two fire management units—a Fire Use Unit (83% of the park; 621,059 acres) and a Suppression Unit (17% of the park; 128,044 acres). In the Fire Use Unit, managed wildland fire would be the primary tool used to restore and maintain natural ecosystems and processes. In a portion of the Fire Use Unit (48,912 acres), additional prescribed burning may be necessary to reduce fuel loads near the Unit's boundary to a point where managed wildland fire would be safe and appropriate. In the Suppression Unit, all wildland fires would be suppressed using the appropriate management response.

## ***Actions Common to All Alternatives***

### **Fire Management Units**

The park is divided into fire management units based on the need for both ecosystem restoration and protection of homes, businesses, historic buildings, and other developments. Under Alternative A (No Action Alternative), unit boundaries would remain the same as the three existing zones (Map 2-19) approved under the park's previous fire management plan. The 1990 plan intended that these boundaries would be dynamic—to be relocated as work was accomplished. Because of the amount of burning from prescribed and wildland fire over the last decade, and because of the direction received from the National Fire Plan, only two units - a large Fire Use Unit and a Suppression Unit - are proposed under Alternatives B, C, and D (Map 2-20).

### **Public Safety**

Public and firefighter safety is the number one priority of all alternatives. The 2001 Federal Fire Policy states: "Firefighter and public safety is the first priority, and all fire management plans and activities must reflect this commitment." NPS Wildland Fire Policy (Director's Order 18) echoes this direction: "The NPS is committed to protecting park resources and natural ecological processes, but firefighter and public safety must be the first priority in all fire management activities." The *Yosemite Fire Management Plan*, regardless of which alternative is selected, would enact necessary measures and direction to ensure the safety of firefighters and the public.

### **Public Information and Education**

An active partnership in fire education would be a component of yearly planning for park staff in the divisions of Interpretation and Resources Management and in the branch of Fire and Aviation Management. Fire education would be a component of the park's interpretation program. The Office of Media Relations would notify adjacent communities by press release before some prescribed fires are implemented. Media Relations would work closely with visiting Fire Information Officers who may be part of an Incident Management Team or Fire Use Management Team, to assure the park message is delivered effectively. During emergency wildland fire situations, park interpretive staff would provide information to visitors and would assist the incident information officer. A smoke communication strategy (Appendix 4) would be used

during fire management activities as a blueprint for managing smoke events and communicating with communities and other agencies.

### **Mitigation Measures**

To ensure protection of natural and cultural resources and the quality of the visitor experience, a set of mitigation measures would be applied to actions implemented under this plan. These mitigation measures also would be applied to future actions that are guided by this plan. Mitigation measures have been identified that relate to safety and human impacts, natural resources, cultural resources, treatment of snags and slash, visual quality, and communication/coordination. A general discussion of mitigation measures is presented below, and measures are addressed in more detail in Chapter 2 (Alternatives).

### **Protection of Resources of Management Concern**

Yosemite has a variety of cultural and natural resources of particular concern to park managers, such as rare habitats, and listed plant and wildlife species. On-the-ground inventories of proposed prescribed fire units and managed wildland fire areas would be pursued if such resources were known, or had potential to occur within the unit, and appropriate protection measures would be taken.

### **Non-Native Plant Species Management**

Fire would be used as a tool, when appropriate, to manage invasive non-native plant species. Prescribed burns would be scheduled for seasons when introduction or spread of such species would not be enhanced. If prescribed fires cause invasive non-native plants to increase and create a fire hazard, fire management funds may be used to mitigate the hazard, including the use of mechanical treatment methods.

### **Air Quality/Smoke Management**

Strict adherence to state and federal air quality regulations would occur under all alternatives. This process mandates consultation with California Air Resources Board (CARB) and local (county) Air Pollution Control Officers (APCO), and other federal and state agencies that are involved with similar fire treatments. Ignition of prescribed fires would only be done on “burn days” or if allowed by a variance from the county APCO. Monitoring would document visual aspects of the smoke column or particulate matter levels using specialized equipment.

### **Air Quality Watershed Strategy**

Smoke movement patterns have a direct relationship to watersheds, especially below 7,500 feet. If several fires were burning simultaneously in the same air-quality watershed, down-valley smoke might be extreme. Because of this, the park would control additional starts within an air-quality watershed that already had a fire burning within it, upon request of local or state air quality regulators. Cumulative smoke impacts also would be managed through coordination and scheduling of burn projects with neighboring burners and agencies.

### **Research and Monitoring**

Fire monitoring would include monitoring of wildland and prescribed fires, and systematic data collection on fuels, topography, weather, air quality, fire behavior, and ecosystem response. For cultural resources, cultural resource specialists (usually a fire archeologist) would identify any

necessary pre-burn mitigation or resource protection measures required, and the most appropriate monitoring strategy for burns.

Current fire management strategies are based on more than 30 years of scientific studies and research. As the program continues to mature, additional information would be gathered and used to refine objectives and meet new challenges. New research needs and priorities would be identified by the Fire Management Office in conjunction with Yosemite's Resources Management Division and the research scientist from the USGS Western Ecological Research Center, Yosemite Field Station. Adaptive management would be used to guide fire management activities by drawing on the best available science, emergent technologies, and an ever-increasing database on the role and effects of fire on park resources.

### **Roads and Trails Used for Fire Protection**

Roads, trails, and utility corridors within the park would provide access for monitoring and control of wildland fires (Maps 2-23 and 24). Roads, fire motorways, and trails would be used as boundaries for prescribed burns, anchor points for constructing fire line, and as fire line. They would provide access for engines and crew transports trying to get to an unwanted fire rapidly. No new roads are proposed under any alternative for fire or fuel management projects.

### **Yosemite Fire Management Organization and Responsibilities**

The fire management program is directed by the Fire Management Officer (FMO). The Fire Management Officer reports to the Visitor Protection Division Chief, and supervises specialists in charge of other fire management functional areas, including wildland fire suppression, aviation, structural fire, prescribed fire, and wildland fire used for resource benefits.

### **Fire Reporting**

Fire reporting follows guidelines established by Directors Order 18 and the associated reference manual, RM-18 (NPS 1998, 1999b). All fires, regardless of type, are required to have a written report, which is tracked at park and national levels.

## ***Description of the Alternatives***

### **Alternative A – No Action**

Under Alternative A – the No Action Alternative – the fire management program would continue to use the strategies of the existing 1990 fire management plan. These strategies include prescribed fire, management of natural ignitions (managed wildland fire), fire suppression, and hand cutting followed by pile burning and prescribed fire. The use of mechanical means to achieve forest restoration target conditions would not occur.

The Fire Management Units for this alternative would be the same as the zones used in the 1990 plan: the Fire Use Unit equals Zone I – Prescribed Natural Fire Zone; the Conditional Unit equals Zone II – Conditional Fire Zone; and the Suppression Unit equals Zone III – Suppression Zone (see Map 2-19). Wildland/urban interface areas are not identified.

Under this program the park has averaged 1,472 acres of prescribed burning and 2,567 acres of managed wildland fire each year (Table ES-1). Levels of accomplishment under this plan are shown in Table A-6.3 in Appendix 6. Acreage treated each year with prescribed and wildland fire has varied widely.

While weather and wildfire activity contribute to these annual fluctuations, other important factors include smoke management regulations, and concern that a prescribed fire might escape into a community. Fuel reduction in and near these communities has not been sufficient to significantly reduce this latter concern, and thus a broader use of fire near communities has been precluded.

Acres treated under Alternative A have not approached the target of 16,000 acres that scientists believe would need to burn annually to simulate natural conditions. Over the last decade the park has reduced hazardous fuels near developed areas, but the goal of providing a more open and more fire-safe forest in and around every community may not be met at this rate.

**Table ES-1**  
**Summary of Alternatives (Alternative A uses terminology from in the 1990 Fire Management Plan).**

	<b>NO ACTION ALTERNATIVE</b>	<b>ACTION ALTERNATIVES</b>		
	<b>Alternative A</b>	<b>Alternative B</b>	<b>Alternative C</b>	<b>Alternative D</b>
Years to Achieve Ecosystem Restoration Goals	Not achieved at present level of activity	10 to 15 years	25 years	15 to 20 years
Years to Achieve WUI Protection	Not a high priority under the 1990 <i>Fire Management Plan</i>	5 years	10 years	6 to 8 years
Average Number of Acres Treated Annually (inner WUI)	Less than 100 acres for all developed areas	approximately 1,285	approximately 766	approximately 1,095
Average Number of Acres Treated Annually – Prescribed Fire	1,472 acres per year (over the past 29 years)	2,520 to 12,872	1,260 to 6,436	1,817 to 9,194
Average Number of Acres Treated Annually - Managed Wildland Fire	2,567 acres per year (average over the past 27 years)	Maximize managed wildland fire with a target of 16,000 acres per year (all treatments) based on fire history data indicating what would have naturally burned.		

### **Alternative B – Aggressive Action**

Under Alternative B, hazardous wildland fuels in the six WUI areas would be substantially reduced within 5 years, and fire-related ecosystem restoration goals would be achieved within 10 to 15 years (Table ES-1). Techniques in the six WUI communities (Table ES-2) would include use of chainsaws and handpiling (i.e., passive techniques), and use of feller bunchers, tractors, skidders, crushers, and similar equipment (i.e., aggressive techniques) to remove trees up to 12” dbh for wildland fuel reduction objectives and up to 20” for forest restoration objectives in the inner WUI. Thinning followed by prescribed fire would occur in the ¼ mile-wide zone adjacent to WUI communities (inner WUI), while prescribed fire followed by thinning (if needed and supported by a subsequent project level Environmental Assessment) would be done from ¼ up to 1½ miles from WUI communities (outer WUI).

Alternative B would reduce fuels on an average of 1,285 acres per year in inner WUI areas (Maps 2-6 through 2-18) over 5 years (6,425 acres total). Aggressive mechanical fuel reduction methods would be used on less than 1% of the park; following this treatment, prescribed fire would be used in WUI areas as much as possible for fuel and ecosystem maintenance.

Median and maximum fire return interval departure (FRID) analyses were used to determine locations and to set annual goals (range of acres) for treatments, using various restoration, maintenance, and fuel reduction strategies (Maps 2-4 and 2-5, Table 2.5).

Natural fire regimes would be restored in areas, generally in the Suppression Unit, that have missed four or more fire return intervals by treating between 2,520 and 12,872 acres per year, for a total of 31,503 to 160,894 acres within about 15 years. This alternative would treat WUI areas and accomplish restoration goals in the shortest amount of time compared to the other alternatives.

**Table ES-2**  
**Fire and Mechanical Treatments Used in Alternative B by Unit (XX indicates primary strategies for that area).**

ALTERNATIVE B	Suppression Unit			Fire Use Unit		
Treatment Strategy	WUI	Non-WUI/ Non-Wilderness Road Corridors	Wilderness	WUI	Non-WUI/ Non-Wilderness Road Corridors	Wilderness
Aggressive Reduction	XX					
Passive Reduction	X	X	X	XX	XX	X
Managed Wildland Fire					XX	XX
Prescribed Fire	XX	XX	XX	XX	X	X

### **Alternative C – Passive Action**

Under Alternative C, efforts would be taken to decrease fuels in WUI areas in 10 years, and accomplish ecosystem restoration goals in 25 years (Table ES-1). Because of this timeframe, the number of acres treated each year would be the least among the three action alternatives. Fuels would be reduced in the six inner WUI areas by an average of 766 acres per year over 10 years.

The fire regime would be restored in areas, generally in the Suppression Unit, that have missed four or more fire return intervals by treating between 1,260 and 6,436 acres per year (31,503 to 160,894 acres over 25 years). Prescribed burning would be increased over what the current program accomplished, but not as much as under Alternative B; mechanical treatment methods would be limited to chainsaws and hand piling. “Passive” therefore refers to a somewhat longer timeframe and less intensive mechanical treatment methods, relative to other action alternatives (Table ES-3).

Because of the extended timeframe, this alternative would depend on wildland fire to play a larger role in ecosystem restoration than other action alternatives. However, more areas may experience unnaturally large, high-intensity, stand replacement wildland fires, because of the hazardous levels of fuels that would remain for a longer period in the Suppression Unit. Under this alternative, it would take more time to accomplish the park’s goals than under other action alternatives, but less than under Alternative A. By the time all areas were treated, however, many areas would have missed another fire return interval or two, thus, the risk of stand replacement fire would remain high throughout the restoration period.

**Table ES-3**  
**Fire and Mechanical Treatments Used in Alternative C by Unit and Area** (XX indicates primary strategies for that area).

<b>Treatment Strategy</b>	<b>Suppression Unit</b>			<b>Fire Use Unit</b>		
	<b>WUI</b>	<b>Non-WUI/ Non-Wilderness Road Corridors</b>	<b>Wilderness</b>	<b>WUI</b>	<b>Non-WUI/ Non-Wilderness Road Corridors</b>	<b>Wilderness</b>
Aggressive Reduction						
Passive Reduction	XX	XX	X	XX	XX	X
Managed Wildland Fire					X	XX
Prescribed Fire	XX	XX	XX	XX	XX	X

### Alternative D – Multiple Action

Alternative D combines aggressive and passive fuel reduction techniques to achieve protection, fuel reduction, and ecosystem restoration goals. Under this alternative, passive and aggressive treatment strategies would be used in the WUI, while prescribed fire and passive mechanical fuel reduction techniques would be used to achieve ecosystem restoration goals in other areas, but at a rate intermediate between Alternatives B and C (Tables ES-1 and ES-4). In the inner WUI, hand thinning would generally be used to remove trees up to 12" dbh, while aggressive methods would be used to remove 12-20" dbh trees

This alternative would reduce fuels on approximately 1,095 acres per year for 6-8 years in the inner WUI (6,425 acres total). It would restore natural fire regimes to areas, generally in the Suppression Unit, that have missed four or more fires by treating between 1,817 and 9,194 acres per year for 15-20 years (31,503 to 160,894 acres total).

Aggressive and passive thinning methods would be used around the six WUI communities (Hodgdon Meadow, Foresta, Yosemite West, El Portal, Yosemite Valley, and Wawona). Mechanical thinning followed by prescribed fire would be used in the core and ¼ mile-wide area adjacent to the six communities (inner WUI). Prescribed fire followed by thinning (if needed and supported by a project level Environmental Assessment) would be done from ¼ mile up to 1½ miles adjacent to the six WUI communities (outer WUI) to restore target vegetation conditions. This alternative would require more time to accomplish WUI protection and ecosystem restoration than Alternative B, but less time than Alternatives A or C.

**Table ES-4**  
**Fire and Mechanical Treatments Used in Alternative D by Unit and Area** (XX indicates primary strategies for that area)

<b>Treatment Strategy</b>	<b>Suppression Unit</b>			<b>Fire Use Unit</b>		
	<b>WUI</b>	<b>Non-WUI/ Non-Wilderness Road Corridors</b>	<b>Wilderness</b>	<b>WUI</b>	<b>Non-WUI/ Non-Wilderness Road Corridors</b>	<b>Wilderness</b>
Aggressive Reduction	XX					
Passive Reduction	XX	X	X	XX	XX	X
Managed Wildland Fire					XX	XX
Prescribed Fire	XX	XX	XX	XX	X	X

## Alternatives Considered, But Dismissed

During public scoping for the *Draft Yosemite Fire Management Plan EIS*, several alternative actions were recommended by members of the public. Others were suggested by scientists, technical specialists, and NPS employees. While all were considered, and many were included as alternatives or elements of alternatives, some were eliminated from detailed study per 40 CFR 1504.14(a). Reasons for dismissing alternatives and elements include:

- Technical or economic infeasibility.
- Inability to meet project objectives.
- Duplicative with other less environmentally damaging alternatives.
- In conflict with an up-to-date and valid plan, statement of purpose and significance, or other policy, and therefore, would require a major change in that plan or policy to implement.
- Environmental impacts were too great.

Alternatives that were considered but dismissed include the following:

***Suppress All Fires*** This alternative was dismissed for several reasons, including its inconsistency with NPS and federal wildland fire management policy and Yosemite's *General Management Plan*, which calls for allowing natural processes, including fire, to prevail.

***Disallow the Use of Mechanical Fuels Treatment*** This alternative was dismissed because of the need to retain options when developing strategies for reducing fuels and the risk of harmful wildland fire along the WUI. Years of fire suppression have resulted in buildup of fuels and a change in forest structure in many locations. In some areas, even the use of prescribed burning to simulate the role of fire would likely be ineffective because changes in forest structure would be difficult to reverse through the use of fire alone. Prescribed fire may be unsafe to use near communities with heavy accumulations of wildland fuels, or because of health concerns related to smoke sensitivity.

***Use Mechanical Treatments Only*** This alternative was dismissed because of its inability to meet park objectives and because it would be in conflict with federal and NPS policies. Even where mechanical techniques are effective in restoring forest structure and reducing risks near WUI areas, prescribed burning is needed after mechanical treatments because of the important ecological influences of fire. Mechanical treatments would rarely meet the minimum tool requirement in the Wilderness portions of the Fire Use Unit because managed wildland fire and prescribed fire can meet objectives in most of these areas.

***Approaches to Protecting WUI Structures Without Fuel Treatment.*** One comment on the *Draft Yosemite Fire Management Plan EIS* suggested that the range of alternatives was inadequate because it did not include simply using fire retardant foam or heat reflective tents to protect structures in WUI areas. This comment was considered but was not included in the *Final Yosemite Fire Management Plan EIS* because it did not represent an alternative per se for managing fire to accomplish park and resource management objectives. It is a tactical option for protecting structures.

## Affected Environment

A list of specific impact topics was developed to compare environmental impacts of fire management activities among the four alternatives. These topics were selected based on federal law, regulations, and executive orders; agency management policies; federal wildland fire management policies; information from subject matter experts; and concerns expressed by the public or other agencies during the public scoping periods.

The existing environment that could be affected by actions proposed in the *Final Yosemite Fire Management Plan EIS* is described in Chapter 3. Existing conditions establish the baseline for the analysis of effects found in Chapter 4 (Environmental Consequences).

## Environmental Consequences

An impact analysis for each of the impact topic areas has been completed for each of the four alternatives in the Final Yosemite Fire Management Plan EIS. Chapter 4 (Environmental Consequences) describes both beneficial and adverse effects in detail. These consequences are briefly summarized below.

### **Alternative A, No Action**

**Biological Environment** Application of Alternative A would result in adverse, long-term, minor to moderate effects on vegetation park-wide, and would result in high potential for catastrophic fire, including stand-replacement fires, in upper and lower montane forests. Effects of such fire on wildlife would be potentially adverse, long-term, and major because of the following:

1. loss of habitat through changes in vegetation structure and fuel loading;
2. potential for catastrophic fire; and
3. habitat type conversion, including potentially detrimental changes in groundwater.

Adverse, long-term, minor effects on special-status species plants are likely because of the small and fragmented location of populations. Greater effects on special-status wildlife species (including moderate and major effects for some species) are likely because of the adverse effects of catastrophic fire in upper and lower montane forests. Adverse, long-term, major effects are likely on wetlands because of fragmentation and the creation of barriers resulting from high-intensity fire, as well as through the effects of erosion, turbidity, and siltation.

**Physical Environment** Adverse, long-term, moderate effects are likely due to the potential for catastrophic fire in the western portions of the park. Fires could affect ridge, mid-slope and bottom slope areas of watersheds, increasing water yield, peak flows, nutrient yield, sediment yield, and stream system response. Lesser effects would be expected from prescribed fire activity and wildland fires allowed to burn in the Conditional and Fire Use zones. Major, adverse, short-term impacts on air quality could occur because of unwanted catastrophic fires that consume areas with high concentrations of fuels.

**Cultural Environment** Adverse, long-term, major impacts to archeological resources would occur due to the likelihood of catastrophic fire and emergency suppression actions and their effects on surface and subsurface materials, and risks associated with exposure of artifacts to

looting and vandalism. Adverse, short-term, minor to moderate impacts to ethnographic resources would occur, mainly due to increased likelihood of catastrophic fire and its effects on traditionally gathered plant materials. Adverse, long-term, major effects on cultural landscape resources would occur, including impacts to significant historic structures and other elements on the landscape.

**Social Environment** Adverse, short-term, minor effects on recreation would occur from short-term closures and restrictions during fire management activities, including prescribed fire and thinning. During large, catastrophic fires, closures and other mandatory actions would result in adverse, short-term, major adverse effects, especially to businesses in and around the park. Adverse, long-term, major effects on scenic resources from high-intensity fires would occur, as would adverse effects on smoke-sensitive members of the community. Adverse, short-term, moderate to major effects on ambient noise levels would occur, especially in WUI areas and during large, catastrophic fires. Risk of direct effects (loss of property during fires) and indirect effects (loss of business during fire-related closures) would be highest under Alternative A. Beneficial, long-term, minor effects on minority and low income populations in park communities would occur due to reduction of risk of loss of work because of such closures.

**Special Designations** Wild and Scenic Rivers are discussed in Chapter 5. Fires allowed to burn would have beneficial, long-term, minor to moderate effects on Wilderness through actions that would maintain plant communities within their natural range of variability and reduce likelihood of large, high intensity fires that could spread into Wilderness. Unnaturally intense wildland fires would have adverse, long-term, major impacts on scenic resources. In Wilderness, helicopter and chainsaw noise would have adverse, short-term, and major impacts.

**Energy Consumption** This alternative would have adverse, long-term, negligible effects on the park's energy consumption, based on an estimate of 9,683 gallons of various fuels used in fire management activities in an average year.

### ***Alternative B, Aggressive Action***

**Biological Environment** Beneficial, long-term, moderate to major effects on vegetation would occur, due the amount of area treated by prescribed fire and biomass removal, especially in upper and lower montane forests, and from increased levels of wildland fire use. There would be a reduced threat of large, high-severity wildland fires in all areas of the park. Beneficial, long-term, major impacts on wildlife and habitat would occur because of the rapid restoration of forest structure to areas of the park that are significantly degraded because of the exclusion of fire. The threat of catastrophic fire and its impacts on wildlife and habitat would be reduced.

Impacts to special-status species would be, in general, beneficial and minor to major. Mitigation would be required to limit adverse effects of the more aggressive treatment methods. The potential exists for adverse effects on special-status plant species from mechanical treatments, but mitigation requirements would minimize these impacts. Beneficial, long-term, moderate impacts to wetlands would occur from treatments that would reduce the threat of catastrophic fire.

**Physical Environment** Beneficial, long-term, major impacts would occur due to a combination of effects of natural fire in the Fire Use Unit. Beneficial, long-term, major effects in the Suppression Unit would occur due to the reduction of unnaturally large amounts of wildland fuel through prescribed fire and mechanical treatment methods. Compared to Alternative A, the No Action Alternative, deleterious effects on water yield, peak flows, nutrient yield, sediment yield, and stream system response would be less. Increased use of prescribed fire would result in greater than

50% more emissions compared to Alternative A. Wildfire emissions would be less in comparison with Alternative A. This Alternative would generate the largest quantity of emissions among all alternatives, resulting in adverse, short term, major impacts on air quality.

**Cultural Environment** In general, impacts on cultural resources would be beneficial, long-term, and moderate. This alternative reduces, to the greatest extent of all alternatives, the potential for catastrophic fire and its resulting impacts on archeological material, ethnographic resources, and cultural landscape resources. This alternative also poses the greatest potential for adverse impacts to cultural resources, however, due to the use of heavy equipment to reduce fuel loads and the potential for high-intensity prescribed fire, when compared to the other three alternatives. Mitigation measures to reduce such effects would be used. Cultural landscapes in Yosemite and Pate valleys would be restored and maintained.

**Social Environment** Adverse, short-term, minor impacts on recreation would occur, due to the larger area subject to treatment, compared to Alternative A. Under this alternative, there would be less likelihood of high-intensity, catastrophic fires with effects as major as the 1990 A-Rock Fire in Yosemite. Thus, the potential for area or park closures would be reduced. Potential effects of catastrophic fire on recreation would likely be adverse, short-term, and moderate (compared to major under Alternative A). Effects on scenic resources would be beneficial, long-term, and major, if fire is used as a tool to restore and maintain open vistas. During fuel reduction work there would be adverse, short-term, major impacts to ambient noise levels, especially near WUI areas. The noise events would be similar to those found under Alternative A, but the number of events and the duration of fuel treatment operations would be substantially greater than under Alternative A. Noise impacts on Wilderness would be the same as under Alternative A.

Impacts to communities would be beneficial, long-term, and moderate to major, because prescribed fire and mechanical thinning would restore plant community conditions in and near communities and developed areas. Risks associated with large, catastrophic fires would be greatly reduced in this alternative; direct effects (loss of property during fires) and indirect effects (loss of business during fire-related closures) would be greatly reduced compared to Alternative A; effects on minority and low income populations in and near the park would be similar to effects on local communities.

**Special Designations** Wild and Scenic Rivers are discussed in Chapter 5. Effects on Wilderness would be beneficial, long-term, and moderate to major, due to actions that would be generally beneficial in maintaining plant communities within their natural range of variability, thereby maintaining Wilderness values. This is especially true for the Fire Use Unit. Benefits in the Suppression Unit would be greater than under Alternative A, due to the large amount of fuels treatment and prescribed fire, and reduced potential for large, high-intensity fires in Wilderness. Helicopter and chainsaw noises would continue to introduce short-term intrusions, with adverse, short-term, and major effects, the same as under Alternative A.

**Energy Consumption** This alternative would have adverse, long-term, major impacts on the park's use of energy, with approximately 250,330 gallons of various fuels used in fire management activities in an average year.

### ***Alternative C, Passive Action***

**Biological Environment** Under this alternative the impacts on biological resources would be beneficial, long-term, and minor to major. This is due to an increase in the area treated by

prescribed fire and an increase in managed wildland fire, compared to Alternative A, but with potential for catastrophic fire during much of the restoration period. The timeframe for restoration is within the normal range of fire return intervals for all but five vegetation types. Beneficial, long-term, moderate impacts on wildlife and habitat would occur through eventual restoration of park habitats to a more natural, fire-influenced condition that would support a more natural abundance, diversity, and distribution of species. The long period of time (25 years) to reduce the threat of catastrophic fire under this alternative could lead to unwanted wildland fires, resulting in adverse, short- to long-term, major impacts on flora and fauna. Effects on special-status plant species would be similar to those under Alternative A, due to the locations of these plants. Effects on special-status wildlife species would be beneficial, compared to Alternative A, because of reduced potential for catastrophic fire. Individual wetlands could incur beneficial, long-term, minor to moderate impacts, but overall park wetlands would see only negligible ecological benefits.

**Physical Environment** Beneficial, long-term, moderate impacts on watersheds and soils would occur. Large, high-severity fires would likely occur during the life of the plan, but the treatments proposed would reduce their adverse effects on soils and watersheds, including the potential for adverse effects on water yield, peak flow, nutrient yield, sediment yield, and stream system response. Air quality impacts would be adverse, short term, and major; increases would be slightly above 50% of Alternative A for all emissions except volatile organic compounds (VOC). The increase in VOC emissions would be considered adverse, short term, and moderate.

**Cultural Environment** Beneficial, long-term, minor to moderate impacts on archeological materials, ethnographic resources, and cultural landscape resources would occur. Impacts would be similar to those described for Alternative B, but there would be a greater potential for catastrophic fire effects under this alternative. Cultural landscapes in Yosemite and Pate valleys would be restored and maintained.

**Social Environment** Alternative C would cause adverse, short-term, minor effects on recreation due to short-term area closures and restrictions during application of fire management treatments, including prescribed fire and thinning. The potential for large, catastrophic fire events and their likely effect on recreation would be similar to, but less intense than, under Alternative A. Beneficial, long-term, moderate effects on scenic resources would occur because of more annual accomplishments in prescribed fire and fuel reduction than under Alternative A. Impacts on ambient noise levels would be adverse, short-term, and major, especially near WUI areas. Noise events would be similar to those described under Alternative A. Risks associated with large, catastrophic fires would be reduced in this alternative, compared to Alternative A, resulting in beneficial, long-term, moderate impacts on local communities. Direct impacts (loss of property during fires) and indirect impacts (loss of business during fire-related closures) would be the higher under this alternative than under Alternatives B or D. This is because of a smaller amount of annual prescribed burning and mechanical thinning to restore plant communities in developed areas and elsewhere in the Suppression Unit. Effects on minority and low income populations in and near the park would be the same as on local communities.

**Special Designations** Wild and Scenic Rivers are discussed in Chapter 5. Wilderness ecosystem impacts would be beneficial, long-term, and minor to moderate, similar to Alternative A. The potential for large, high-intensity fires in Wilderness would remain fairly high during the life of the plan. Helicopter and chainsaw noises would continue to introduce short-term intrusions, with adverse, short-term, and major effects, the same as under Alternative A.

**Energy Consumption** Impact on the park's energy consumption would be adverse, long-term, and major because of the annual use of 22,368 gallons of various fuels used in fire management activities.

### ***Alternative D, Multiple Action***

**Biological Environment** Beneficial, long-term, moderate to major impacts on vegetation would occur, due to the amount of area treated by prescribed fire and biomass removal, especially in upper and lower montane forests, and from increased use of managed wildland fire. Reduced threat of large, high-severity wildland fires in all areas of the park and a reduced potential for type conversion of vegetation would occur. Impacts on wildlife and habitat associated with restoration of a more natural forest structure to areas of the park where fire has been excluded would have beneficial, long-term, major impacts. The threat of catastrophic fire and its impacts on wildlife and habitat would be greatly reduced under Alternative D. Generally, effects would be beneficial and minor to major for special-status animal species, because measures would be taken to limit adverse effects of treatments. Effects on special-status plants would be similar to Alternative A, although some adverse impacts would be possible from mechanical treatments. In wetlands, effects would be similar to Alternative B; park wetlands would experience moderate to major ecological benefits, due to the multiple action approach.

**Physical Environment** Beneficial, long-term, major effects, similar to those under Alternative B, would be expected. Fires would likely affect a smaller portion of the watershed (e.g., a portion of the slope rather than the entire vertical gradient), compared to Alternative A. Deleterious effects on water yield, peak flows, nutrient yield, sediment yield, and stream system response would be reduced compared to Alternative A. Increased use of prescribed fire would result in greater than 50% more emissions as compared to Alternative A. Air quality effects would be adverse, short term, and major.

**Cultural Environment** Generally impacts on cultural resources would be beneficial, long-term, and moderate because of reduced potential for catastrophic fire and its effects on archeological material, ethnographic resources, and cultural landscape resources. There is potential for adverse, long-term, moderate to major impact due to use of heavy equipment to reduce fuel loads, and due to the potential for high-intensity, prescribed fire. Cultural landscapes in Yosemite and Pate valleys would be restored and maintained.

**Social Environment** Compared to Alternative A, adverse, short-term, minor effects on recreation would be expected due to a greater area of treatment. The potential for large, catastrophic fire events would decrease, reducing the potential for area or park-wide closures. Effects of catastrophic fire on recreation would likely be adverse, short-term, and moderate. Scenic resource impacts would be beneficial, long-term, and major, if fire is used to restore and maintain open vistas. Adverse, short-term, major effects on ambient noise levels would be expected, especially near WUI areas. Noise events would be similar to those under Alternative A, but the number and duration of events would be greater. Impacts on communities would be beneficial, long-term, and moderate to major, because prescribed fire and mechanical thinning would restore plant community conditions in developed areas, thereby reducing the risk of catastrophic fire and associated losses. Direct effects (loss of property during fires) and indirect effects (loss of business during fire-related closures) would be greatly reduced compared to Alternative A; these effects would be the same for minority and low income populations in and near the park.

**Special Designations** Wild and Scenic Rivers are discussed in Chapter 5. Effects on Wilderness would be beneficial, long-term, and moderate to major due to actions that would be generally beneficial in maintaining plant communities within their natural range of variability, thereby maintaining Wilderness values, especially in the Fire Use Unit. Benefits in the Suppression Unit would be greater than under Alternative A due to a greater amount of fuels treatment and prescribed fire, and lower potential for high-intensity, catastrophic fires. Helicopter and chainsaw noises would cause short-term, adverse, and major effects, much like under Alternative A.

**Energy Consumption** Impacts to the park's use of fuel would be adverse, long-term, and major due to the annual use of 147,462 gallons of various fuels used in fire management activities.

## Summary

The Yosemite National Park fire management program is based on the National Fire Plan, with its key feature of firefighter and public safety as the top priority for the Yosemite program. Other important components of the Plan are restoration of fire as an ecological process, as well as the development of partnerships with neighboring communities, local and state governments, and other agencies to reduce the risk posed by unwanted wildland fire.

In response, the Yosemite fire program would be interactive with its neighbors and partners. Fuels management projects would be selected in collaboration with residents of the six WUI communities discussed in the EIS. Smoke management strategies would be developed and implemented with information and concerns expressed by affected publics as well as state and local air quality regulators. Program objectives would be developed and refined through adaptive management as information from previous projects and operations are assessed by park managers, cooperators, and scientists.

The *Final Yosemite National Park Fire Management Plan EIS* has been developed with consideration of the views and thoughts expressed during the planning process by many citizens with a deep regard for the park. The park staff would continue to listen to concerns and issues that arise during implementation of the fire management program, and revise the program accordingly to ensure that the objectives of the National Fire Plan are met to the fullest extent possible.